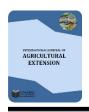
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LIVESTOCK EXTENSION (A CASE STUDY)

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ABSTRACT

"Livestock extension" is usually taken to mean doing production-type extension work with livestock such as nutrition, animal health, and animal management. Usually the direct beneficiary of the input is the animal owner. The USAid-funded Balochistan Agricultural Project (BAP) accepts this traditional view. In addition, it recognizes that for most animal producers, the purpose of rearing the animal is to sell it. For many animal producers, the Eid Livestock Mandis is a critical selling period. BAP has facilitated the introduction of community-managed Eid Livestock Mandis in four sites in Balochistan. A heavy component of the Project's extension efforts was to provide management and financial training to the communities involved. One of the sites is now totally community operated with the others moving to total community ownership and management in a programed manner. As a result of the initiative, more animal producers with only a few animals have participated in the marketing process with higher returns and lower costs. Present manuscript analyzed and described the process that led to the current situation and provide hard data to illustrate the gains from the process.

Keywords: Livestock Extension, BAP, USAID, livestock.

BACKGROUND

Balochistan is the largest of Pakistan's four provinces, covering 44 percent of the country's total land area, but has the smallest population (i.e. 7.1 million people, equivalent to 5.1 percent of the total national population) and is considered the least developed. Poverty is high, increasing from 1.5 million in 1998 to 2.1 million in 2005 - mainly because of the long drought, 1999 to 2004. The World Bank estimated the rural poverty headcount rate in Balochistan in 2005 to be 34.6 percent. Over three-quarters of Balochistan's population lives in rural areas and agriculture accounts for over 65 percent of the provincial gross domestic product and employs nearly two-third of the labour force. Crops contribute around 60 percent of the gross farm income and livestock about 35 percent. Subsistence agriculture and livestock rearing, poor quality rural roads and tracks and inadequate access to public services, safe drinking water, health and education are all common in rural areas throughout the province. In Balochistan

poverty is widely and evenly distributed and well entrenched. The rugged terrain, poor access and communications, fragile ecosystems and lack of skills limit agricultural productivity. Absence of efficient marketing networks and services and the strong presence of "middle-men" results in low returns and little incentive for productivity improvements. Agricultural problems faced by marginal smallholder farmers in north-eastern Balochistan Province can be summarised as: (i) crop and livestock productivity levels are generally low and partial or complete crop failures are common; (ii) limited access to water supplies, inefficient use of the water that is available, and low levels of on-farm water management; (iii) poorly managed, over-grazed and degraded rangelands resulting in low levels of livestock production, increasing soil erosion and reduced water storage; (iv) weak research and extension systems with very limited outreach capacity; (v) high post-harvest losses and weak and underdeveloped value chains; (vi)

off-farm employment opportunities in rural areas are

Province, rural communities are small, scattered and isolated, and there are few major urban centers, and

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limited and seasonal migration, particularly of male household members, is common; (vii) most poor rural households are food deficit, and devote as much as 80 percent of household expenditure on food items (but at the same time, there is considerable scope to increase household incomes by raising agricultural production); and (vii) continuing increases in food prices to unprecedented levels create both risks and opportunities for resource poor marginal and smallholder farmers.

Between 2004 and 2008, the Food and Agriculture Organization of the United Nations (FAO) implemented the United States Agency for International Development (USAID)-funded "Food Security and Poverty Alleviation in Arid Agriculture Balochistan (FSPAB) - Pilot Project Phase" in three districts of north-eastern Balochistan Province (i.e. KillaSaifullah, Loralai and Mastung). This Pilot Phase was followed by a three-year (extended to four-years) development response of tested and validated approaches in the same three districts, with the addition of the neighbouring districts of Quetta and Zhob, under the USAID-funded "United States Assistance to Agricultural Development in Balochistan Border Areas (USABBA) Project" (FAO **Project** GCP/PAK/113/USA(A)). Project interventions during the two phases not only resulted into ensuring food security but also left producers (herders) with surplus volume which needed to be profitably marketed. Impressed by the project outcome, the USAID decided to continue its support through expanded area by including three more districts namely Pishin, Musa Khel and Sheerani and assisting in profitable disposal of surplus produce. Therefore, a third phase of the project was launched under the name of Balochistan Agriculture Project (BAP). The BAP places greater emphasis on capacity building, technological innovation management and value chain development of new and improved production and marketing practices that have been researched and developed under the FSPAB Pilot Project Phase and USABBA Project.

IMPORTANCE OF LIVESTOCK

As mentioned earlier, livestock contributes 35% towards Provincial Gross Domestic Product. Some two-thirds of rural households in western Balochistan engage at least part-time in animal husbandry as large parts of the province are arid and unsuited for arable agriculture. Higher living standards and urbanisation, not only in Pakistan, but neighbouring countries and regions, have

boosted the commercial potential of Balochistan's meat, milk, wool, etc. Yet, the bulk of production systems remain subsistence-oriented. For centuries, transhumance and common property grazing developed as response against seasonal rains and localized droughts. But the impact of the prolonged drought (1998 to 2005), growing human and livestock populations (and over-grazing), influxes of refugees and changes in landuse patterns due to urbanization have reduced the common property resource across the rangelands.

Ninety-three percent of Baluchistan's land area (32.3 million hectares) is classified as rangeland of which 20.9 million hectares are used for grazing. However, only about three million hectares are classified as "good to excellent" grazing (i.e. yielding 250 to 280 kg of dry matter per hectare) and about six million hectares as "medium" grazing, and are found mostly in highland Balochistan. About 11.7 million hectares are classified as "poor" grazing (i.e. yielding 30 to 50 kgs of dry matter per hectare) and are found generally in the southern region. It is estimated that between 85 and 95 percent of all feed for Balochistan's small ruminants come from the rangelands.

Sheep and goats are the major livestock in Balochistan Province. Of all provinces in Pakistan, Balochistan has the largest number of sheep (12.8 million) and camels (380,000) and third largest number of goats (11.8 million), i.e. 48, 41 and 22 percent of the total populations respectively. As a general rule in Pakistan, over 60 percent of the sheep and goat populations are kept in herds of less than 30 animals. However, in Balochistan Province there are often large herds of goats and sheep that are grazed on the arid and semi-arid rangelands.

Nearly 30 percent of the province's sheep and nearly 20 percent of the goats are found in the north-eastern districts of Loralai, KillaSaufullah, Mastung, Musakhel, Pishin, Quetta, Sherani and Zhob Districts. Populations of sheep in Loralai, KillaSaufullah and Musakhel Districts are in excess of 750,000 animal and, in Mastung and Pishin Districts, they are in excess of 500,000 animals. Similarly goat populations in excess of 700,000 animals in KillaSaifullah District, and in excess of 350,000 animals in Loralai, Musakhel and Pishin Districts. Camel populations are highest in Musakhel (in excess of 20,000 animals) followed by Mastung and KillaSaifullah Districts (both in excess of 10,000 animals). Cattle populations are relatively high in Loralai, KillaSaifullah,

Musakhel, Pishin and Zhob Districts (with populations ranging from 50,000 to 100,000 animals per district) with potential for fresh milk production, so long as the fodder can be secured. However, only Loralai District produces a significant amount of fodder (of more than 50,000 tonnes per year).

Importantly, livestock are more evenly spread across rural households than agricultural land resources. This means that productivity gains in livestock are more likely to be pro-poor (and have a stronger gender dimension) than productivity gains of major crops.

ORGANIZATION OF LIVESTOCK EID MANDIS

It is widely acknowledged that the economy of Balochistan largely depends on its agriculture, where livestock sub-sector is conspicuous. The share of Agriculture in Gross Provincial Product in Balochistan is more than 50% and in this share, livestock contributes about 40%. If we go in the interior of province we see at every place that herds of sheep and goat are managed by women, small girls & boys. These herds of sheep and goat provide livelihood to thousands of households.

Unfortunately these households in spite of their hard work do not get due reward of their labour. Why it is so? They know rearing of animals, but they are not familiar with marketing forces and marketing information. Poor men and women in districts lack knowledge and information about markets. They have limited understanding how markets function and very little information on the nature of demand in these markets and prices is available. The middle men purchase their animals at cheap rates and sell the same produce at higher rates in the markets in major towns. The poor household families do not have financial capacity to bring their animals to the towns; therefore, they are constrained to sell their animals locally at cheap prices. The marketing mechanics has to be changed.

Livestock extension" is usually taken to mean doing production-type extension work with livestock such as nutrition, animal health, and animal management. Usually the direct beneficiary of the input is the animal owner. The USAid-funded Balochistan Agricultural Project (BAP) accepts this traditional view. In addition, it recognises that for most animal producers, the purpose of rearing the animal is to sell it.

The rapid appraisal of existing marketing opportunities/places in the project areas revealed that

such facilities were non-existent with the exception of Quetta district. The farmers were reluctant to take their animals to distantly located markets due lack of orientation, absence of contacts, risk of low prices, extra cost incurred on transportation, etc. At the same time, the project found that selling activity picked up on the eve of Eid and hence an opportunity.

The BAP has come up with an easy solution that if it is difficult for the members of the households to come to major towns and do not have access to markets, then in the alternative, it would be advantageous to bring markets close to them, where they could learn the sale process of their animals. This was the objective under which livestock markets were set up in project districts. It was aimed that by introduction of livestock markets, livestock buyers from other towns for animal trading will be attracted in project districts. In addition, a number of associated activities have been undertaken to address weaknesses and raise the capacity of men and women beneficiaries to respond effectively and competitively to market opportunities/demands.

Why Eid Mandis? – Instead of taking animals to the market, the market is established at door-step of livestock herders: Livestock Marketing is one of the important income generating activities. It provides ready cash in need, regular income and security against crop failure due to persistent drought setback. Farmers market all types of small and large ruminants. Mainly farmers deal in marketing of sheep and goats with a very small number of cows.

Presence of market outlets increases the efficiency of marketing system and provides farmers an opportunity to sell their animals as and when needed. By bringing markets closer to producers, the project reduces the cost to the farmers, increases their bargaining power, and improves their revenues. In addition farmers sell their animals on special Eid occasion. The Capacity Building component of the project aims at building capacity at the house-hold and community level to enable poor men and women to increase livestock productivity and to increase agricultural incomes through marketing. The project places particular emphasis on ensuring women's participation. Poor women will be empowered in order to increase their contribution to household and community decision making and raise their direct contribution to household income generation.

The concept of Livestock Eid Mandis was introduced for the first time in the Project Areas in the year 2007 by holding such a mandi in KillaSaifullah. In the year 2008, one more livestock mandis was added held at Loralai. The number of livestock eidMandis increased to four in 2012 with the addition of two more districts namely Mastung and Zhob.

Preparations for the Livestok EidMandis entailed coordination meetings with the line departments of livestock and local government and town municipality. Besides coordination, the dissemination of information

was done through distribution of flyers with information regarding the date and venue and purpose of the event. The flyers were distributed along with announcements via loud speakers, throughout the valleys. Statements were given in newspapers.

As a result of the initiative, more animal producers with only a few animals have participated in the marketing process with higher returns and lower costs.









View of Livestock EidMandi (Vet services also available).

RESULTS/IMPACT OF LIVESTOCK EID MANDIS

The feedback form the stakeholders on Livestock Eid Mandis revealed that it largely facilitated the producers in selling their animals at competitive prices in close proximity of their farms. Table 1 contains information on number of animals traded and incremental sales made by the producers during the period from 2009 to 2012:

Table 1: Animals Traded and Sales Revenue Generated during 2009 to 2012

Years	Districts	Sheep		Goat		Large Animals	
		Number	Sales (Rs)	Number	Sales (Rs)	Number	Sales (Rs)
2012	KillaSaifullah, Mastung, Loralai, Zhob	15,394	183,092,388	10,263	90,891,694	1,867	9,312,138
2011	KillaSaifullah, Mastung, Loralai, Zhob	32,800	381,710,000	20,566	189,721,350	1,317	53,914,688
2010	KillaSaifullah, Mastung, Loralai, Zhob	26,928	269,280,000	7,837	62,696,000	1,053	12,150,000
2009	KillaSaifullah, Mastung, Loralai	6,315	86,279,375	2,706	24,651,250	451	12,325,625
Total Sales		81,437	920,361,763	41,372	367,960,294	4,688	127,702,450
Increase in Income		162,873,400)	62,058,450		46,880,500	
Total increase Income		271,812,350)				

Information presented in Table 1 clearly shows that turnover picked up over time both in terms of number of animals traded and revenue generated though marked by fluctuations within the animal species. Sheep were leading both in number and revenue followed by goats and large animals. The feedback further revealed that participation of producers fluctuated over the years but

exhibited an overall increasing trend as is illustrated through Figure 1. Though marked by annual fluctuations, the participation of buyers in Livestock Eid Mandis also exhibited an overall increasing trend as is evident from Figure 2.The business turnover in financial terms also showed an overall increasing trend as is illustrated through Figure 3.

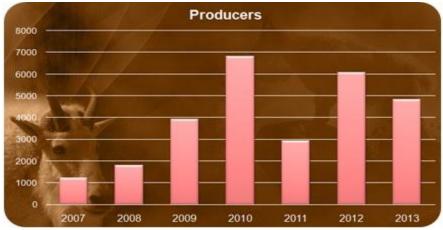


Figure 1. Participation of Producers in Livestock EidMandis

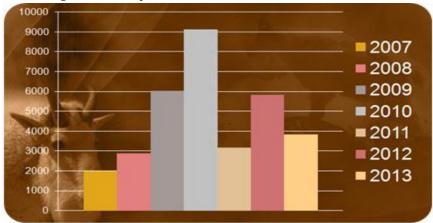


Figure 2. Participation of Buyers in Livestock EidMandis

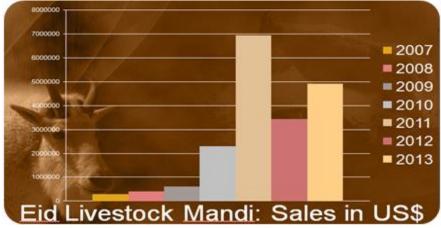


Figure 3: Financial Turnover of EidMandis

The organization of Livestock Eid Mandis not only contributed towards increasing incomes of the farmers but also demonstrated capacity of the community to successfully participate in and organize commercial initiatives. It also paved way for setting up livestock wholesale markets in production centers. In addition, the BAP initiative created opportunities for other businesses like transport, food stalls, foot-wears, clothes,









View of Allied Services

SUSTAINABILITY

Sustainability being an important factor in any project was duly kept in view. The Project has an understanding that support over a period of 3 to 4 years should be sufficient to enable the beneficiaries to acquire managerial and financial skills to successfully undertake commercially motivated activities/enterprises. Therefore, it has designed its exit strategy accordingly. Generally all development interventions are linked with cost sharing i.e. 50% in the case of male and 25% in the case of female driven initiatives. Under the special circumstance like in the case of Livestock rid Mandis, the community participation was made softer as it was a sort of public

service not exclusively confined to communities associated with the project. In the first year 100% financing was made from the project followed by reduced support of 75% in the second year, 50% in the third year and 25% in fourth year. Thereafter, the activity was completely taken over by the community. Accordingly, the Eid Mandi at Killa Saifullah was handed over to the community who organized it themselves in 2013, a step towards sustainability. The possibility is also being explored for setting up an 'Apex' body comprising of representatives drawn from the stakeholders like farmers (sellers), buyers and Livestock Department (optional) to organize and run the annual EidMandi for the respective districts.